



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
27.12.2000 Bulletin 2000/52

(51) Int. Cl.⁷: **A61B 17/115, A61B 17/11,
A61B 17/128**

(43) Date of publication A2:
05.04.2000 Bulletin 2000/14

(21) Application number: **99118064.7**

(22) Date of filing: **23.09.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
• **Nicholas, David**
Trumbull, CT 06611 (US)
• **Smith, Robert**
Shelton, CT 06484 (US)

(30) Priority: **28.09.1998 US 102326 P**
23.02.1999 US 256260

(74) Representative: **HOFFMANN - EITLE**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(71) Applicant:
United States Surgical Corporation
Norwalk, Connecticut 06856 (US)

(54) **Anastomosis instrument**

(57) A surgical instrument for performing an anastomosis includes a housing having a proximal end and a distal end; a shaft extending from the housing distal end; and a disposable loading unit configured and dimensioned to retain a plurality of surgical fasteners, the disposable loading unit extending from the shaft and forming a juncture with the shaft, the disposable loading unit including: i) opposed split-sections pivotably connected to facilitate movement of the opposed split-sections between open and closed configurations, the opposed split sections being movable through a firing stroke from a first position to a second position and back

to the first position to form a plurality of surgical fasteners; and ii) a pivot lockout member including a latch portion which extends between the opposed split-sections, the latch portion including a contact surface which interacts with a corresponding surface formed on at least one of the opposed split-sections to retain the opposed split-sections in the closed configuration, wherein upon return of the fastener pusher member to the first position from the second position, the pivot lockout member is displaced relative to the opposed split sections to an unlocked configuration.

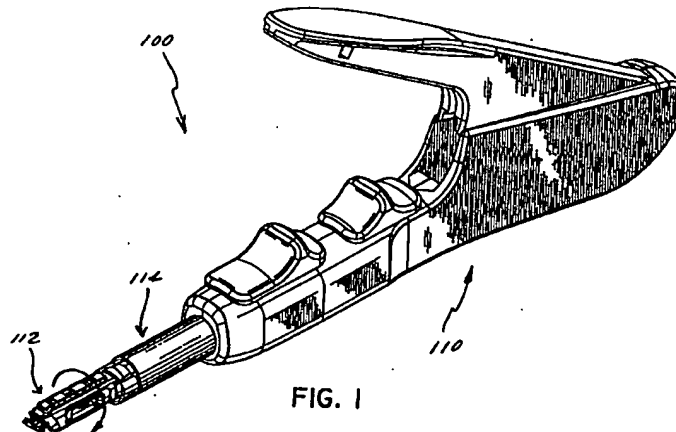


FIG. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 11 8064

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,A	US 5 707 380 A (HINCHLIFFE PETER W J ET AL) 13 January 1998 (1998-01-13) * column 4, line 56 - column 5, line 16 * * column 6, line 22 - column 7, line 52 * * figures 1,3A,4 *	1,2,4,8,9	A61B17/115 A61B17/11 A61B17/128
P,A	EP 0 885 595 A (UNITED STATES SURGICAL CORP) 23 December 1998 (1998-12-23) * the whole document *	1-13	
A	US 5 762 256 A (ALESI JR THOMAS W ET AL) 9 June 1998 (1998-06-09) * column 10, line 26 - line 57; figures 4,5 *	1-3	
A	US 5 443 198 A (VIOLA FRANK J ET AL) 22 August 1995 (1995-08-22) * column 7, line 7 - line 41; figure 1 *	1,2	
A	US 4 700 703 A (RESNICK SEMION ET AL) 20 October 1987 (1987-10-20) * column 4, line 59 - column 5, line 20; figures 1,3,4 *	1,2	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61B
A	WO 95 35065 A (HEARTPORT INC) 28 December 1995 (1995-12-28) * abstract; figure 1 *	1,2	
A	US 5 403 333 A (KASTER ROBERT L ET AL) 4 April 1995 (1995-04-04) * the whole document *	1,2	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 1 November 2000	Examiner Ducreau, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1500 03.82 (P/UCO1)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 11 8064

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-11-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5707380 A	13-01-1998	AU 722259 B	27-07-2000
		AU 2943797 A	29-01-1998
		CA 2210617 A	23-01-1998
		DE 69701339 D	06-04-2000
		DE 69701339 T	24-08-2000
		EP 0820725 A	28-01-1998
		ES 2143273 T	01-05-2000
		JP 10118078 A	12-05-1998
		US 6083234 A	04-07-2000
		US 6024748 A	15-02-2000
EP 0885595 A	23-12-1998	US 6024748 A	15-02-2000
		AU 7190398 A	24-12-1998
		CA 2240638 A	17-12-1998
		JP 11070114 A	16-03-1999
		US 6083234 A	04-07-2000
US 5762256 A	09-06-1998	AU 720144 B	25-05-2000
		AU 6429396 A	06-03-1997
		CA 2183497 A	01-03-1997
		DE 69601561 D	01-04-1999
		DE 69601561 T	15-07-1999
		EP 0760230 A	05-03-1997
		ES 2128134 T	01-05-1999
		JP 9164144 A	24-06-1997
		US 6032849 A	07-03-2000
		US 5782396 A	21-07-1998
US 5443198 A	22-08-1995	US 5915616 A	29-06-1999
		CA 2107848 A	10-04-1994
		DE 69312417 D	28-08-1997
		DE 69312417 T	18-12-1997
		EP 0591999 A	13-04-1994
		ES 2105036 T	16-10-1997
		US 5474223 A	12-12-1995
		AU 660712 B	06-07-1995
		AU 2536492 A	22-04-1993
		CA 2079716 A	19-04-1993
		DE 69223898 D	12-02-1998
		DE 69223898 T	28-05-1998
		EP 0537570 A	21-04-1993
		ES 2111027 T	01-03-1998
		JP 5200037 A	10-08-1993
		US 5558266 A	24-09-1996
		US 5579978 A	03-12-1996
		US 5878937 A	09-03-1999

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 11 8064

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-11-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5443198 A		CA 2079756 A	19-04-1993
		DE 69217808 D	10-04-1997
		DE 69217808 T	24-07-1997
		DE 537571 T	14-10-1993
		EP 0537571 A	21-04-1993
		ES 2041610 T	01-12-1993
		US 5509596 A	23-04-1996
		US 5706997 A	13-01-1998
US 4700703 A	20-10-1987	US 4903697 A	27-02-1990
WO 9535065 A	28-12-1995	AU 696332 B	10-09-1998
		AU 2512295 A	15-01-1996
		EP 0765137 A	02-04-1997
		JP 10507650 T	28-07-1998
		US 5947363 A	07-09-1999
		US 5709335 A	20-01-1998
		US 5732872 A	31-03-1998
		US 5957363 A	28-09-1999
US 5403333 A	04-04-1995	US 5881943 A	16-03-1999
		US 5234447 A	10-08-1993
		WO 9504503 A	16-02-1995
		AU 4803593 A	28-02-1995
		EP 0713373 A	29-05-1996
		US 5366462 A	22-11-1994

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82